

Welcome to IEEE Xplore™

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

 Print Format
Your search matched **126** of **1043368** documents.A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance** in **Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or entering a new one in the text box.

☐ Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard**1 Efficient implementation of mutual exclusion locks in large multiprocessors***Nian-Feng Tzeng; Fu, S.S.;*

Parallel Processing Symposium, 1995. Proceedings., 9th International , 25-28 April 1995

Pages:270 - 275

[\[Abstract\]](#)[\[PDF Full-Text \(560 KB\)\]](#)

IEEE CNF

2 Lock contention analysis in multiprocessor systems*Hoevel, L.; Panfilov, O.;*

System Sciences, 1990., Proceedings of the Twenty-Third Annual Hawaii International Conference on , Volume: i , 2-5 Jan. 1990

Pages:321 - 327 vol.1

[\[Abstract\]](#)[\[PDF Full-Text \(404 KB\)\]](#)

IEEE CNF

3 Performance modeling of multiprocessor implementations of protocols*Bjorkman, M.; Gunningberg, P.;*

Networking, IEEE/ACM Transactions on , Volume: 6 , Issue: 3 , June 1998

Pages:262 - 273

[\[Abstract\]](#)[\[PDF Full-Text \(284 KB\)\]](#)

IEEE JNL

4 An adaptable constrained locking protocol for high data contention environments*Goel, S.; Bhargava, B.; Sanjay Kumar Madria;*

Database Systems for Advanced Applications, 1999. Proceedings., 6th International Conference on , 19-21 April 1999

Pages:321 - 328

[\[Abstract\]](#) [\[PDF Full-Text \(100 KB\)\]](#) IEEE CNF

5 File partitioning as a means to reduce lock contention in the multiprocessor environment

Hoevel, L.; Panfilov, O.;

System Sciences, 1992. Proceedings of the Twenty-Fifth Hawaii International Conference on , Volume: i , 7-10 Jan. 1992

Pages:211 - 217 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(416 KB\)\]](#) IEEE CNF

6 On the performance of the immediate restart concurrency control policy

Asadi-Arbabi, A.; Banawan, S.A.;

Simulation Conference, 1991. Proceedings., Winter , 8-11 Dec. 1991

Pages:669 - 676

[\[Abstract\]](#) [\[PDF Full-Text \(484 KB\)\]](#) IEEE CNF

7 The performance of protocols based on locks with ordered sharing

Agrawal, D.; El Abbadi, A.; Lang, A.E.;

Knowledge and Data Engineering, IEEE Transactions on , Volume: 6 , Issue: 5 , Oct. 1994

Pages:805 - 818

[\[Abstract\]](#) [\[PDF Full-Text \(1096 KB\)\]](#) IEEE JNL

8 Performance analysis of concurrency control using locking with deferred blocking

Yu, P.S.; Dias, D.M.;

Software Engineering, IEEE Transactions on , Volume: 19 , Issue: 10 , Oct. 1993

Pages:982 - 996

[\[Abstract\]](#) [\[PDF Full-Text \(1420 KB\)\]](#) IEEE JNL

9 On a more realistic lock contention model and its analysis

Thomasian, A.;

Data Engineering, 1994. Proceedings. 10th International Conference , 14-18 Feb. 1994

Pages:2 - 9

[\[Abstract\]](#) [\[PDF Full-Text \(640 KB\)\]](#) IEEE CNF

10 A circular list based mutual exclusion scheme for large shared-memory multiprocessors

Fu, S.S.; Nian-Feng Tzeng;

Parallel and Distributed Systems, IEEE Transactions on , Volume: 8 , Issue: 6 , June 1997

Pages:628 - 639

[\[Abstract\]](#) [\[PDF Full-Text \(324 KB\)\]](#) IEEE JNL

11 Improving software MP efficiency for shared memory systems

Sinharoy, B.; Govindaraju, R.;
System Sciences, 1996., Proceedings of the Twenty-Ninth Hawaii International
Conference on , , Volume: 1 , 3-6 Jan. 1996
Pages:111 - 120 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(812 KB\)\]](#) [IEEE CNF](#)

12 **Software interleaving**

Bianchini, R.; Crovella, M.E.; Kontothanassis, L.; LeBlanc, T.J.;
Parallel and Distributed Processing, 1994. Proceedings. Sixth IEEE Symposium
on , 26-29 Oct. 1994
Pages:56 - 65

[\[Abstract\]](#) [\[PDF Full-Text \(800 KB\)\]](#) [IEEE CNF](#)

13 **An analytical performance model for parallel production systems**

Wang, J.-H.; Srivastava, J.;
Tools with Artificial Intelligence, 1992. TAI '92, Proceedings., Fourth International
Conference on , 10-13 Nov. 1992
Pages:362 - 369

[\[Abstract\]](#) [\[PDF Full-Text \(544 KB\)\]](#) [IEEE CNF](#)

14 **Performance limits of two-phase locking**

Thomasian, A.;
Data Engineering, 1991. Proceedings. Seventh International Conference on , 8-12
April 1991
Pages:426 - 435

[\[Abstract\]](#) [\[PDF Full-Text \(872 KB\)\]](#) [IEEE CNF](#)

15 **Concurrency control of bulk access transactions on shared nothing
parallel database machines**

Ohmori, T.; Kitsuregawa, M.; Tanaka, H.;
Data Engineering, 1990. Proceedings. Sixth International Conference on , 5-9 Feb.
1990
Pages:476 - 485

[\[Abstract\]](#) [\[PDF Full-Text \(772 KB\)\]](#) [IEEE CNF](#)

[1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [Next](#)

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved

Searching for **lock and thread**.

Restrict to: [Header](#) [Title](#) Order by: [Expected citations](#) [Hubs](#) [Usage](#) [Date](#) Try: [Amazon](#) [B&N](#) [Google](#) (CiteSeer) [Google \(Web\)](#) [CSB](#) [DBLP](#)

750 documents found. **Only retrieving 500 documents (System busy - maximum reduced)**. Retrieving documents...
Order: number of citations.

APRIL: A Processor Architecture for Multiprocessing - Agarwal, Lim, Kranz.. (1990) (Correct) (174 citations)
diminishes due to synchro# nization latency. Spin **lock** accesses havealowover# head of memory requests#
race conditions are resolved using the #ne#grain **locking** provided by the full#empty bits. 3.3 Fine#grain
processor called APRIL with support for #ne#grain **threads** and synchroniza# tion. APRIL achieves high
www.cs.berkeley.edu/~kubitron/papers/alewife/pdf/isca-april.pdf

Empirical Studies of Competitive Spinning for A Shared-Memory .. - Anna Karlin Kai (1991) (Correct) (84 citations)
operation in multiprocessor programs is acquiring a **lock** to protect access to shared data. Typically, the
Typically, the requesting **thread** is blocked if the **lock** it needs is held by another **thread**. The cost of
www.cs.washington.edu/homes/karlin/papers/spinlock.ps

Eraser: A Dynamic Data Race Detector for.. - Savage, Burrows.. (1997) (Correct) (54 citations)
Eraser, for dynamically detecting data races in **lock**-based multithreaded programs. Eraser uses binary
shared-memory reference and verify that consistent **locking** behavior is observed. We present several case
www.cs.washington.edu/homes/savage/papers/Tocs97.pdf

Escape Analysis for Java - Choi (1999) (Correct) (53 citations)
(with a median of 19%11% to 92% of all **lock** operations are eliminated in those ten programs
only by garbage collection. Each object has a **lock** associated with it, which is used to ensure mutual
(ii) if an object is accessed only by a single **thread** during its lifetime, so that synchronization
www.research.ibm.com/people/g/gupta/escape.ps

Synthesis: An Efficient Implementation of Fundamental Operating.. - Massalin (1992) (Correct) (48 citations)
that can support real-time data streams. ffl **Lock**-free optimistic synchronization is shown to be a
shown to be a practical, efficient alternative to **lock**-based synchronization methods for the
ftp.cs.columbia.edu/reports/reports-1992/cucs-039-92.ps.gz

Compositional Pointer and Escape Analysis for Java Programs - Whaley, Rinard (1999) (Correct) (47 citations)
model. Conceptually, every Java object comes with a **lock**. Each synchronized method ensures that it executes
executes atomically by acquiring and releasing the **lock** in its receiver object. But the **lock** overhead is
for objects that are accessed by only one **thread** and to allocate objects on the stack instead of
www.stanford.edu/~jwhaley/papers/oopsla99.ps

Model Checking Java Programs Using Java PathFinder - Havelund, Pressburger (1998) (Correct) (46 citations)
that are either local to a **thread** or protected by a **lock** owned by the **thread**. This work can be seen as
on the buffer object by a **thread**, the buffer gets **locked** to serve that **thread**, and it is unlocked again
effort to formally analyze, using Spin, a multi-**threaded** operating system for the Deep-Space 1 space
ase.arc.nasa.gov/havelund/Publications/jpf-sttt.ps.Z

Sparcle: An Evolutionary Processor Design for.. - Agarwal.. (1993) (Correct) (36 citations)
the HEP #16#With full#empty bits# the probe of a **lock** and access of the data word protected by the **lock**
a **lock** and access of the data word protected by the **lock** can be accomplished in one operation. If the
latencies by rapidly switching to other **threads** of computation. The current implementation of
www.cs.berkeley.edu/~kubitron/papers/alewife/pdf/sparcle.pdf

Removing Unnecessary Synchronization in Java - Bogda, Hölzle (1999) (Correct) (32 citations)
the java virtual machine (JVM) acquires a monitor **lock** on entry to each synchronized method and releases
method and releases it on exit. The monitor **locks** are reentrant, which means the same **thread** can
if an object is reachable only by a single **thread**, concurrent access is impossible and no
www.ovmj.org/kacheck/p35-bogda.pdf

The Cilk System for Parallel Multithreaded Computing - Joerg (1996) (Correct) (31 citations)
defined a "dag-consistent" memory model which is a **lock-free** consistency model well suited to the needs of
defined a "dag-consistent" memory model which is a **lock-free** consistency model well suited to the needs
the PCM .35 2.2.2 The **Thread** Specification Language .36
www.lcs.mit.edu/publications/pubs/ps/MIT-LCS-TR-701.ps.gz

Thin Locks: Featherweight Synchronization for Java - Bacon (1998) (Correct) (29 citations)
Thin Locks: Featherweight Synchronization for Java David F.
problem with a new algorithm that allows **lock** and unlock operations to be performed with only a
www.research.ibm.com/people/d/dfb/papers/Bacon98Thin.ps

Obtaining Sequential Efficiency for Concurrent.. - Plevyak, Zhang, Chien (1995) (Correct) (28 citations)
are location independent) and managing concurrency (**locks**) Furthermore, the high procedure call frequency
with runtime primitives supporting naming, **locking**, location, and concurrency control. This model
ffl a shared name space, ffl dynamic **thread** creation, and ffl object level access control. A
www-csag.ucsd.edu/papers/seqeff-popl95.ps

Practical Considerations for Non-Blocking Concurrent Objects - Bershad (1993) (Correct) (26 citations)
or Atomic Exchange. We then evaluate several **locking** strategies that can be used to synthesize a
serializes access within critical sections where **locks** are used to control access. Non-blocking
A non-blocking object can be accessed by many **threads** at a time, yet update protocols based on atomic
www.cs.columbia.edu/~nieh/teaching/e6118_s00/papers/non-blocking.pdf

Fixing the Java Memory Model - Pugh (1999) (Correct) (25 citations)
existing Java memory model discusses use, assign, **lock** and unlock actions: A use action corresponds
(e.g, astore) Java bytecode instruction. A **lock** action corresponds to a monitorenter Java bytecode
Language Specification gives constraints on how **threads** interact through memory. The Java memory model
www.cs.ucsb.edu/conferences/java99/papers/51-pugh.ps

On-The-Fly Detection of Access Anomalies - Schonberg (1989) (Correct) (25 citations)
the Ada rendezvous, barrier synchronization, **lock/unlock** operations, and message passing primitives.
as do across coordination, message send/receive, and **locking** operations, cannot be modeled by synchronous
anomaly occurs when two concurrent execution **threads** both write (or one **thread** reads and the other
ftp.nyu.edu/pub/ultra/ucn/101-150/ucn149.ps.Z

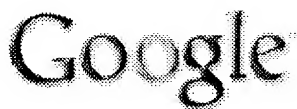
Storage Reclamation and Reorganization in Client-Server.. - Yong, Naughton, Yu (1994) (Correct) (25 citations)
separate buffer pools. We assume a simple two-phase **locking** mechanism with page-level **locking** for
simple two-phase **locking** mechanism with page-level **locking** for concurrency control, and write ahead
logging for crash recovery. The server is multi-**threaded**, with a separate collector **thread** activated to
www.cs.wisc.edu/~jiebing/dataengr.94.2.ps

Performance Evaluation of Two New Disk Scheduling Algorithms .. - Shenze Chen John (1991) (Correct) (23 citations)
with fixed algorithms for concurrency control, **lock** conflict resolution, commit processing, CPU
request re-submit Restart terminate CPU Scheduling **lock** request/release abort commit wait block DB
computational entity (e.g. a task, a process, a **thread**, or a transaction) has a deadline when submitted
ftp.cs.umass.edu/pub/techrept/techreport/1990/UM-CS-1990-077.ps

First 20 documents [Next 20](#)

Try your query at: [Amazon](#) [Barnes & Noble](#) [Google \(CiteSeer\)](#) [Google \(Web\)](#) [CSB](#) [DBLP](#)

CiteSeer.IST - Copyright [NEC](#) and [IST](#)



[Web](#) [Images](#) [Groups](#) [News](#) [Froogle](#) [more »](#)

"light lock" "heavy lock" contention

Search

[Advanced Search](#)
[Preferences](#)

Web

Results 1 - 3 of about 7 for "**light lock**" "**heavy lock**" contention. (0.25 seconds)

Tip: Try removing quotes from your search to get more results.

[Conservative two-phase locking - encyclopedia article about ...](#)

... In **heavy lock contention**, C2PL reduces the time locks are held on average ... In **light lock contention**, C2PL holds more locks than is necessary, because it is hard ...

[encyclopedia.thefreedictionary.com/ Conservative%20two-phase%20locking](#) - 19k - [Cached](#) - [Similar pages](#)

[natObject.cc - Implementation of the Object class. /* Copyright \(C ...](#)

... exit, so that a single **contention** episode doesn't ... since nobody else can hold // **light lock** or do ... address), (addr | was_heavy)); } else { // Must use **heavy lock**. ...

[www.opensource.apple.com/darwinsource/ 10.2.3/gcc3-1161/libjava/java/lang/natObject.cc](#) - 42k - Supplemental Result - [Cached](#) - [Similar pages](#)

[Tom Tromeu - Patch: hash synchronization](#)

... so that a single **contention** episode doesn't ... nobody else can hold + // **light lock** or do ... address), (addr | was_heavy)); + } else + { + // Must use **heavy lock**. ...

[gcc.gnu.org/ml/java-patches/2001-q2/msg00273.html](#) - 82k - [Cached](#) - [Similar pages](#)

In order to show you the most relevant results, we have omitted some entries very similar to the 3 already displayed.

If you like, you can repeat the search with the omitted results included.

"light lock" "heavy lock" contention

Search

[Search within results](#) | [Language Tools](#) | [Search Tips](#) | [Dissatisfied? Help us improve](#)

[Google Home](#) - [Advertising Programs](#) - [Business Solutions](#) - [About Google](#)

©2004 Google

[Web](#)[Images](#)[Directory](#)[Yellow Pages](#)[News](#)[Products](#)

TOP 2 WEB RESULTS out of about 4 Search took 0.284 seconds. ([What's this?](#))

1. <http://gcc.gnu.org/ml/java/2001-03/msg00038/hash-sync-v3.patch> [☞](#)

This is changed for gcj, but it will be in version 6.0 of the */ + /* standard collector distribution.
gcc.gnu.org/ml/java/2001-03/msg00038/hash-sync-v3.patch - 82k - [Cached](#)

2. [Tom Tromeo - Patch: hash synchronization](#) [☞](#)

... heavyweight +// status in response to **contention**. Unlike the SGI ... proc (jobject obj) +{ + **heavy_lock** *hl = (h
lock or do this at ...
gcc.gnu.org/ml/java-patches/2001-q2/msg00273.html - 83k - [Cached](#)

In order to show you the most relevant results, we have omitted some entries very similar to the ones already displayed. If you like, you can [repeat the search with the omitted results included](#).

Help us improve your search experience. [Send us feedback](#).

[Web](#)[Images](#)[Directory](#)[Yellow Pages](#)[News](#)[Products](#)

Your Search: "light lock" "heavy lock" contention

[Yahoo! Search](#)[Advanced Web Search
Preferences](#)